

REMARKS

Claims 1, 11-13, 14, and 17-19 are hereby amended; claims 9 and 10 are hereby canceled. Accordingly, claims 1-8 and 11-19 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

Claims 1-8, 10, and 14-16 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,814,194 to Deguchi et al. ("Deguchi"). Claims 11-13 and 17-19 were rejected under 35 U.S.C. 103(a) as obvious over Deguchi in view of U.S. Patent No. 6,238,582 to Williams et al. ("Williams").

The rejection of Claims 1-8 and 14-16 under 35 U.S.C. 102(b) is respectfully traversed and reconsideration is requested. Claims 1-8 recite a combination of elements including, for example, "an ion beam source that is a predetermined distance from the substrate and inclined to be substantially parallel with the substrate and that irradiates the substrate with an ion beam along the ion beam path, wherein the ion beam is discharged from the ion beam source with an incidence angle with respect to the substrate that is greater than about 0°." Claims 14-16 recite a combination of elements including, for example, "producing ion beams to irradiate the whole substrate with ions, wherein the ion beams strike the substrate with the same incidence angle and energy across the substrate, and wherein the ion beams all travel substantially the same distance and the incidence angle is greater than about 0°." Deguchi fails to teach or suggest at least these elements of claims 1-8 and 14-16. Deguchi only discloses a beam ion path with an incidence angle of 0°, which is different from the present invention. Therefore, the Applicant submits that claims 1-8 and 14-16 are allowable over Deguchi.

The rejection of Claims 11-13 and 17-19 under 35 U.S.C. 103(a) is respectfully traversed and reconsideration is requested. Claims 11-13 recite a combination of elements including, for example, "an ion beam source that is a predetermined distance from the substrate and inclined to be substantially parallel with the substrate and that irradiates the substrate with an ion beam along the ion beam path, wherein the ion beam is discharged from the ion beam source with an incidence angle with respect to the substrate that is greater than about 0°." Claims 17-19 recite a combination of elements including, for example, "producing ion beams to irradiate the whole substrate with ions, wherein the ion beams strike the substrate with the same incidence angle and energy across the substrate, and wherein the ion beams all travel substantially the same

distance and the incidence angle is greater than about 0°." As discussed above Deguchi fails to teach or suggest at least these elements of claims 11-13 and 17-19. Further, Williams fails to cure this deficiency of Deguchi, therefore, the Applicant submits that claims 11-13 and 17-19 are allowable over Deguchi.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner deems that a telephone conference would help expedite the prosecution of this application, the Examiner is requested to call the undersigned attorney at (202) 496-7500. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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